REMARKS

Specification

The requested corrections to typographical errors noted by the Examiner have been entered. Applicants appreciate the Examiner's attention in catching these.

Claim Rejections - 35 USC 102

Claims 1-4, 9-18, 21-26 and 28-46 were rejected under 35 USC 102(b) as anticipated by Severson et al. ('431). However, applicants believe that the claims in their present form are allowable over Severson et al.

A basic distinction is that in Severson et al. a series of sound segments, which may be chosen randomly, are taken from an otherwise continuous sound and reassembled into a continuous sound sequence. Each segment begins immediately after the end of the preceding segment, with no overlaps or gaps between segments. By contrast, in the preferred embodiment of the present invention, sound events are combined together with a random time distribution for the occurrences of at least some of the kinds of sounds; the time distributions for the occurrences of the sound events are independent of the durations of those events. This can result in multiple sound events overlapping, or in gaps between events, unlike Severson et al. in which the sound segments are continuous and sequential. Although Severson et al. refers to the possibility of "silent pauses" between sound segments, such pauses would be deliberately inserted and not the result of any random selection (column 2, lines 46-48).

A more detailed description of the above summary for the Severson et al. operation is provided in the patent as follows:

-Column 2, lines 33-36: "Then these independent segments are re-assembled into a continuous, never-repeating sound sequence based on selecting the next sound segment according to some statistical algorithm."

-Column 2, lines 60-67: "In general, the method includes... selecting one of the sound segments according to the probably density function; playing the selected sound segment; and repeating said selecting and playing steps thereby generating non-looped continuous sound." (emphasis added)

-Column 8, lines 63-66: "To further increase the depth and realism of continuous sound animation it is possible to have one or more aspects of the sound generation and sequencing be responsive to various events or inputs." (emphasis added)

-Column 11, lines 33-37 (RSS implementation): "When the Digital Sound Generator, 306, is finished with playing out the present sound record, it will accept the new address, and request from Sound Memory, 307, the sound record at the address in Address Latch, 305."

-Column 11, lines 59-61: "If there is more than 1 sound record in the memory, 307, then this embodiment will play a continuous series of sound records that will be randomly sequenced..." (emphasis added)

-Column 14, lines 3-5: "Summary of New Concepts
1. The concept of randomly sequencing a set of sounds to produce a never-repeating continuous sound effect." (emphasis added)

Support for the random distribution of times for the occurrence of sound events with the present invention independent of the event durations, is provided in the specification as follows:

-Page 6, lines 24-26: "The trigger process selects a random time lag between subsequent events that make up the large-scale or complex events."

-Page 7, lines 3-8: "For example, ambient sound such as cricket chirps are typically generated at a constant average rate. That is, while the time between individual chirps fluctuates randomly to provide a natural environment, the average time between chirps is constant over a large time period."

-Page 8, line 3 - page 9, line 14: "There are two main embodiments of the trigger process, both of which are characterized by a particular statistical distribution of the time between individual events. In the embodiment of FIG. 3A, the trigger process samples white noise and generates events when a strongly low pass-filtered noise signal crosses zero in an upward-going direction... An alternative embodiment of the trigger process is illustrated in FIG. 3B. In this embodiment, event generation is based directly on predefined random distribution. After an event is generated, a random generator selects a

value of the time delay, Δt until the next event should be generated. After the selected time delay passes, a new event is generated. This new event then triggers the random generator to select a time delay for the next event according to the predefined random distribution."

Thus, the time interval between the initiation of successive sound events is generated randomly in this embodiment, independent of the durations of the individual events.

Claims 1 and 35 in their present form embody this distinction over Severson et al. Claim 1 includes the step of "establishing respective random time distributions for the occurrences of least some of said kinds of sounds." By contrast, the time distribution of sound segments in Severson et al. is not random. Each sound segment begins immediately upon the conclusion of the preceding sound segment, so that the time distribution of segments is determined by the durations of the segments, rather than randomly.

Claim 35 includes the step of "generating a succession of simpler sound events that are distributed in time with a random time distribution". This patentably distinguishes over Severson et al. for reasons similar to claim 1.

New claims 47 and 48, which depend respectively from claims 1 and 35, add the explicit requirement that the random time distributions of their parent claims are independent of the durations of the sound events. New claims 49 and 50 are similar to claims 1 and 35, but ex-

press the timing of the sound events in terms of the "trigger" process referred to at page 6, lines 15-18 and 24-28 of the specification. While the preferred embodiment utilizes a random time distribution of sound events, it is also possible to have a deterministic or pseudo-random distribution (specification page 14, lines 1-6), and in recognition of this claims 49 and 50 do not require a random time distribution.

Claim Rejections - 35 USC 103

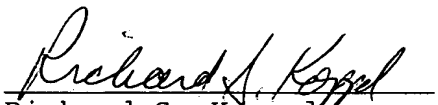
Claims 5, 19, 20 and 27 were rejected under 35 USC 103(a) as unpatentable over Severson et al. ('431) in view of Borza et al. for claim 5, or Severson et al. ('318) for claims 19, 20 and 27. Since these claims all depend directly or indirectly from claim 1, which has been shown above to be patentable over Severson et al. ('431), they should also be allowable in their present form.

Allowable Subject Matter

Claim 6-8 were objected to as being dependent upon a rejected base claim, but were found to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 6 has been rewritten accordingly to incorporate the limitations of its parent claims 5 and 1. Claims 7 and 8 depend from claim 6, and accordingly incorporate this change without further amendment.

All of the claims are now in proper form for allowance, and a Notice of Allowance is respectfully requested.

Respectfully submitted,



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